APPENDIX

CLAIMS

1. (Twice Amended) A coordinate input apparatus for inputting a three-dimensional position in three-dimensional coordinates, comprising:

a plurality of sensors for receiving light emitted by a light emission device of designation means [and determining a three-dimensional position where the light emission device exists]; and

calculation means for calculating and determining the three-dimensional position in the three-dimensional coordinates of [a position where] said designation means with regard to said coordinate input apparatus [exists relative to said coordinate input apparatus,] based on [a determined] values obtained by said plurality of sensors.

11. (Twice Amended) A control method of a coordinate input apparatus for inputting three-dimensional coordinates, comprising the steps of:

inputting a three-dimensional position of a light emission device based on light emission of the light emission device;

receiving the light emitted by the light emission device with a plurality of sensors; and

[determining the three-dimensional position where the light emission device exists based on light emitted by the light emission device and received by a plurality of sensors; and]

calculating and determining the three-dimensional position in the three-dimensional coordinates of [the position where] the light emission device with regard to said

coordinate input apparatus [exists relative to said coordinate input apparatus,] based on [a determined] values obtained by said plurality of sensors [in said determining step].

21. (Twice Amended) A computer-readable memory storing program codes for controlling a coordinate input apparatus which inputs three-dimensional coordinates, said memory comprising:

program codes for an input step of inputting a three-dimensional position of a light emission device based on light emission of the light emission device;

program code for receiving the light emitted by the light emission device with a plurality of sensors; and

[program codes for a determining step of determining the three-dimensional position where the light emission device exists based on light emitted by the light emission device and received by a plurality of sensors; and]

program codes for a calculation step of calculating and determining the three-dimensional position in the three-dimensional coordinates of [the position where] the light emission device with regard to said coordinate input apparatus [exists relative to said coordinate input apparatus,] based on [a determined] values obtained by said plurality of sensors [in said determining step].

22. (Twice Amended) A coordinate input apparatus for inputting three-dimensional coordinates, comprising:

a plurality of sensors for receiving light emitted by a light emission device of designation means [and determining a three-dimensional position where the light emission device exists];

a photoreception device for receiving light emitted by the light emission device;

calculation means for calculating and determining a three-dimensional position in the three-dimensional coordinates of [a position where] said designation means with regard to said coordinate input apparatus [exists relative to said coordinate input apparatus,] based on [a determined] values obtained by said plurality of sensors; and

synchronization means for synchronizing a light emission cycle of the light emission device with a photoreception cycle of said sensors based on a signal outputted by said photoreception device.

35. (Twice Amended) A control method of a coordinate input apparatus for inputting three-dimensional coordinates, comprising the steps of:

receiving light, emitted by a designation device having a light emission device, with a plurality of sensors and a photoreception device [determining a three-dimensional position where the light emission device exists];

[receiving light, emitted by the light emission device, with a photoreception device;]

calculating and determining a three-dimensional position in the three-dimensional coordinates of [a position where] the light emission device with regard to said coordinate input apparatus [exists relative to said coordinate input apparatus,] based on [a

determined] values obtained by said plurality of sensors [in said determining step]; and

synchronizing a light emission cycle of the light emission device with a photoreception cycle of the sensors based on a signal outputted by said photoreception device.

48. (Twice Amended) A computer-readable memory storing program codes for controlling a coordinate input apparatus which inputs three-dimensional coordinates, said memory comprising:

program codes for a [determining] receiving step of receiving light, emitted by a designation device having a light emission device, with a plurality of sensors and a photoreception device [and determining a three-dimensional position where the light emission device exists];

[program codes for a photoreception step of receiving light, emitted by the light emission device, with photoreception device;]

program codes for a calculation step of calculating and determining a three-dimensional position in the three-dimensional coordinates of [a position where] the light emission device with regard to said coordinate input apparatus [exists relative to said coordinate input apparatus,] based on [a determined] values obtained by said plurality of sensors [in said determining step]; and

program codes for a synchronizing step of synchronizing a light emission cycle of the light emission device with a photoreception cycle of the sensors based on a signal outputted by said photoreception device.

49. (Twice Amended) A coordinate input apparatus for inputting three-

dimensional coordinates, comprising:

a plurality of sensors for receiving light emitted by a light emission device of designation means [and determining a three-dimensional position where the light emission device exists];

a photoreception device for receiving light emitted by the light emission device;

binarization means for binarizing an output signal of said photoreception device; and

calculation means for calculating and determining a three-dimensional position in the three-dimensional coordinates of [a position where] said designation means with regard to said coordinate input apparatus [exists relative to said coordinate input apparatus] based on a binarized signal outputted by said binarization means and [a determined] values obtained by said plurality of sensors.

64. (Twice Amended) A control method of a coordinate input apparatus for inputting three-dimensional coordinates, comprising the steps of:

[determining a three-dimensional position where a light emission device exists by] receiving light, emitted by a designation device having the light emission device and a plurality of switches, with a plurality of sensors and a photoreception device;

[receiving light, emitted by the light emission device, with a photoreception device;]

binarizing an output signal of the photoreception device; and

calculating and determining a three-dimensional position in the three-dimensional coordinates [of a position] of the designation device relative with regard to said coordinate input apparatus based on a binarized signal outputted in said binarization step and [determined] values obtained by the plurality of sensors.

79. (Twice Amended) A computer-readable memory storing program codes for controlling a coordinate input apparatus which inputs three-dimensional coordinates, said memory comprising:

program codes for a [determining step of determining a three-dimensional position where a light emission device exists by] receiving light, emitted by a designation device having the light emission device and a plurality of switches, with a plurality of sensors and a photoreception device;

[program codes for a photoreception step of receiving light emitted by the light emission device, with photoreception device;]

program codes for binarization step of binarizing an output signal of the photoreception device; and

program codes for a calculation step of calculating and determining a three-dimensional position in the three-dimensional coordinates of [a position of] the designation device [relative] with regard to said coordinate input apparatus based on a binarized signal outputted in said binarization step and [a determined] values obtained by the plurality of sensors.

80. (Twice Amended) A coordinate input apparatus for detecting a position of a

light spot [relative to] with regard to said coordinate input apparatus, generated on a predetermined two-dimensional coordinate surface with light emitted by a designation device which emits light in a predetermined blinking cycle, and for outputting detected coordinate data, said apparatus comprising:

a first photoreception sensor for detecting from the light spot, a light emission position in two-dimensional direction;

a second photoreception sensor for detecting from the light spot, time series variance of light emitted;

synchronization control means for synchronizing detection operation of said first photoreception sensor with the blinking cycle of light in the light spot based on the time series variance of the light spot detected by said second photoreception sensor; and

calculation means for calculating coordinates of the position of the light spot relative to said coordinate input apparatus, generated on the two-dimensional coordinate surface, based on a signal outputted from said first photoreception sensor brought to a synchronous state by said synchronization control means[.],

wherein each time coordinate data of the light spot for a point is processed, said synchronization control means detects a light-on period start timing or end timing in the blinking cycle of light in the light spot based on the time series variance of the light spot detected by said second photoreception sensor and synchronizes detection operation of said first photoreception sensor with a timing which has been deviated from the detected timing by a predetermined time period.

87. (Twice Amended) A control method of a coordinate input apparatus which detects a position of a light spot [relative to] with regard to said coordinate input apparatus, generated on a predetermined two-dimensional coordinate surface with light emitted by a designation device which emits light in a predetermined blinking cycle, and outputs detected coordinate data, said method comprising:

a first detection step of detecting from the light spot, a light emission position in two-dimensional direction, by using a first photoreception sensor;

a second detection step of detecting from the light spot, time series variance of light emitted, by using a second photoreception sensor;

a synchronization control step of synchronizing detection operation of the first photoreception sensor with the blinking cycle of light in the light spot based on the time series variance of the light spot detected by the second photoreception sensor; and

a calculation step of calculating coordinates of the position of the light spot relative to said coordinate input apparatus, generated on the two-dimensional coordinate surface, based on a signal outputted from said first photoreception sensor brought to a synchronous state by said synchronization control step[.],

wherein in said synchronization control step, each time coordinate data of the light spot for a point is processed, a light-on period start timing or end timing in the blinking cycle of light in the light spot is detected based on the time series variance of the light spot detected by the second photoreception sensor and detection operation of the first photoreception sensor is synchronized with a timing which has been deviated from the detected timing by a predetermined time period.

94. (Twice Amended) A computer-readable memory storing program codes for controlling a coordinate input apparatus which detects a position of a light spot [relative to] with regard to said coordinate input apparatus, generated on a predetermined two-dimensional coordinate surface with light emitted by a designation device which emits light in a predetermined blinking cycle and outputs detected coordinate data, said memory comprising:

program codes for a first detection step of detecting from the light spot, a light emission position in two-dimensional direction, by using a first photoreception sensor,

program codes for a second detection step of detecting from the light spot, time series variance of light emitted, by using a second photoreception sensor;

program codes for a synchronization control step of synchronizing detection operation of the first photoreception sensor with the blinking cycle of light in the light spot based on the time series variance of the light spot detected by the second photoreception sensor; and

program codes for a calculation step of calculating coordinates of the position of the light spot relative to said coordinate input apparatus, generated on the two-dimensional coordinate surface, based on a signal outputted from said first photoreception sensor brought to a synchronous state by said synchronization control step[.],

wherein in said synchronization control step, each time coordinate data of the light spot for a point is processed, a light-on period start timing or end timing in the blinking cycle of light in the light spot is detected based on the time series variance of the light spot detected by the second photoreception sensor and detection operation of the first photoreception sensor is synchronized with a timing which has been deviated from the detected timing by a

predetermined time period.